



Grain

NOVEMBER, 1941



A VOLCANO IS A **GENTLEMAN** COMPARED WITH A DUST EXPLOSION

. . . it rumbles and grumbles before it erupts; signifies its intentions. But a Dust Explosion! Crash! Bang!! And there it is! Flames, fumes, tottering walls . . . no advance "tip-off."

Dust explosion hazards can be minimized, however, with ROBERTSON SAFETY VENTILATORS.

Here's how. Nine out of every ten Dust Explosions originate in elevator *leg*. Disperse the blast and there can be little or *no destruction*.

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So What About Your

MODERN VENTILATION AND DUST CONTROL?

By CHARLES E. HARBIN

Fire Underwriters' Inspection Bureau, Minneapolis
Before the Superintendents' Society

IF IT were possible to rebuild all of our elevators so as to embody each new and proven discovery of our engineers as it is brought forth, the problem of dust control would be comparatively simple. Unfortunately elevators—once they are constructed—are terribly permanent, and our problem is therefore to adapt modern practices to existing buildings insofar as is practical—and to incorporate these features into newly constructed elevators.

I will not attempt any detailed description of standard elevator construction as this subject has been very ably presented to you at other times, but a few features definitely connected with dust control should be mentioned, as the construction of the elevator building has a great deal to do with the ease of controlling dust. The proper ventilation of the building permits much dust—which would otherwise settle in the building—to escape to the outside air, and as large window areas as are practical should be provided in new construction.

An important consideration in the design of new elevators is to allow adequate room for the machinery, line shafting, belts and other equipment, so that all sections of all floors will be easily accessible for proper sweeping. This is an acute problem in many of our older houses, especially in low basements and on cleaner floors.

The provision of boot pits, if any, of ample size for cleaning and oiling is an important item, which should receive careful planning in new construction or when replacing present boots.

DUST STARTS AT CAR DOOR

THE car of grain which is delivered to the elevator contains not only grain but an abundance of dust, and with the first movement of grain from the car is the start of the dust control problem. The car shed with large openings at each end is, you might say, to a certain extent self-ventilating. At any rate the real problem of dust control is when the grain and dust enter the more confined spaces of

the elevator proper. In certain cases, due to location or other conditions, it is advisable to provide suction on the grain sink to prevent the accumulation of dust entering the elevator or surrounding buildings. Especially is this the case with a deep sink, as considerably better conditions can be obtained where dust is troublesome.

The receiving pit should be directly connected with the boot by a dust tight enclosure. In houses where the legs are not located so as to make this possible and where a belt is required to transport the grain, a hood should be placed directly over the loading and discharge ends of the belt, with as tight an enclosure as possible provided for the entire length of the belt. If the house is so constructed that the belt terminates in the car shed, a tight non-combustible partition should be erected between the basement of the elevator and that of the car shed, with suction provided above the point of grain discharge on the car shed side of the partition.

It is not my purpose in this paper to enter into a discussion of air velocities, pipe sizes or other engineering problems of a standard dust collecting system, as these features vary too radically in each installation to permit general rules being given. Each installation requires the knowledge and analysis of an experienced dust control engineer. References will therefore be general, and we will assume proper sized and placed hoods, pipes of adequate size, and fans capable of furnishing the proper air velocity and adequately powered.

CLOUDS, BUT NO SILVER LININGS

AS the belt cups pick up the grain in the boot another dust cloud is raised, which should be taken care of by a hood on the boot enclosure.

"There cannot be a first class elevator unless it has a first class superintendent," Mr. Harbin demonstrates in his very comprehensive and helpful enumeration of the various pointers every grateful reader will wish to follow—particularly in face of necessary defense precautions.

The grain throw at the head is our next point of dust liberation, and each elevator head should be vented either to outside air where the upward air movement following that of the belt tends to form natural ventilation, or the heads may be connected to the dust control system with hood connections.

The grain as it enters the garner not only displaces an equal quantity of air, but also carries with it a considerable volume of air from the leg. It is important therefore that large vents be provided on all garners. It is more economical to provide vents to outside air, but if this is impractical connections may be made to the dust collecting system.

In Minnesota, the State Department requires expansion chambers or grain traps in each suction line ahead of the scale, and I presume similar laws exist in other states. These grain traps will therefore be required on head and boot collectors, on belts from the pits, if any, and on any hoods from garners. Where natural ventilation is used, these traps are of course unnecessary.

The same problem of air displacement is again presented when the grain is dropped from the garner into the scale, but the problem of venting is more difficult due to the movable scale housing and the effect back draft has on the weight of the grain. A general practice is to enclose the space between the garner and scale with a canvas curtain, but such practice is unsatisfactory unless there is also a means of relieving air pressure, such as a vent pipe leading to the outside or to the vented garner above. A very satisfactory vent has recently been installed in some of our local elevators. An opening is cut in the floor above the scale inside the canvas enclosure, and a vent duct is carried to the top of the garner above the highest grain level. In this duct is a damper which is operated simultaneously with the opening and closing of the garner gates, so that the objectionable back draft is eliminated yet an escape is provided for the displaced dust laden air. The installation of such a vent is comparatively easy in most houses.

PROBLEM BECOMES MORE COMPLEX

THE distribution of grain to storage after leaving the scale raises dust clouds at three points: where

fed onto the belts, at the tripper, and the displacement of air in the bins. The dust at the belt loaders can be controlled by the installation of vent hoods, but the tripper presents a more difficult problem. Because the tripper is movable, it has until recently been difficult to connect to a fixed dust collecting system; and individual collectors with the fan to provide suction, operated by the moving belt, were not entirely successful. Fairly satisfactory results however were formerly obtained from both methods and either was far better than no control at all—but now perfect control has been developed by one experienced engineer. A well ventilated gallery or distributing floor will of course improve conditions considerably. At any rate the dust collecting system should be extended to the end of the belt, and a hood provided to catch the tailings which otherwise accumulate with considerable rapidity, and as these consist of light, finely divided particles a decided hazard is introduced if they are not removed. Where the individual collector is used, a hood can also be placed under the belt to care for these tailings and the hood at the belt end eliminated.

In the older houses which were constructed with open top bins, it is probably impossible to make any change. If the bins are decked, tight covers should be provided for all openings not in use and individual bins vented to outside air as far as possible. In new construction provisions should be made to vent all bins.

BASEMENT VENTILATION IMPOSSIBLE; MORE SWEEPERS NEEDED

TUNNELS under tank groups should not be overlooked in the installation of a complete dust control system, as it is impossible in most cases to provide natural ventilation. Choke feeders with vent hoods at each should keep suspended dust at a minimum.

Where these belts discharge grain, proper hoods should of course be provided.

Regardless of the effectiveness of dust control appliances, all dust cannot be eliminated and one or more sweepers should be employed in each elevator. Floor sweeps should be provided at easily accessible points, at least one on each floor, to aid in the disposal of the sweepings. The floor sweeps should also be extended to cover both the gallery and tunnel of tank groups, as well as the elevator proper. The use of vacuum sweepers has not as yet been developed to handle the volume of dust from an elevator, and where installations have been made have not proved satisfactory.

In houses which have driers, an added dust hazard exists. In these driers the hoppers above the drier and below the cooler should be equipped with suction. All floors, walks, platforms and runways around the drier and cooler or in the coil

chamber should be gratings, except where air separation is necessary. The separation should consist of hoppers beneath a grating floor and the hoppers should be connected to the dust collecting system. Solid floors may be used if all air is drawn from the drier and cooler through continuous ducts to fan, and blown outside or to dust settling chamber with hopper bottom connected to dust collecting system. All solid floors in drier should be equipped with floor sweeps.

CONNECT CLEANERS; INSTALL MAGNETIC SEPARATORS

MACHINERY in an elevator is another feature which liberates dust and all cleaners should be connected to the dust collecting system.

As a protection against sparks which might be caused by foreign matter getting into clippers, oat hullers, scourers, or feed grinders, a screen is recommended in the grain flow ahead of these devices, with grinders being further protected by electric magnets properly installed.

The dust collected by the various agencies must of course be disposed of and should not be stored within 40 feet



of any part of the elevator or attached additions. The dust house should be of incombustible construction. If dust is burned, suitable dampers should be provided in the feed pipe and no provisions made for storage in or about the boiler room.

Because I am a fire insurance man and interested in fire prevention work as well as in the making of fire insurance rates, I am going to dwell for a time on hazards which exist in all elevators, how they can be safeguarded or eliminated, and standard practices which if followed not only make a safer risk but tend to reduce insurance costs.

The elevator with standard dust control equipment is comparatively easy to keep clean, but many houses make cleanliness more difficult by permitting the storage of unused machinery, old spouting or other unnecessary material. This storage impedes sweepers and causes the accumulation of unnecessary dust. All of this material should be stored in detached warehouses, if the highest standard of cleanliness is to be maintained.

It is hardly necessary to mention that smoking should be prohibited in all except detached dressing rooms, and here proper containers should be provided for cigarette "butts." Metal containers should also be provided in

dressing rooms for paper towels, if used, or for lunch refuse if the room is used as a lunch room.

The power used in operating the elevator is a potential fire hazard that should receive the most careful consideration. If steam power is used, the boilers should of course be in a separate building of fire resistive construction, or if existing buildings have combustible roofs or sides, care should be taken to provide ample clearance between boiler breeching or metal stacks and any combustible material. Ample space should also be provided in front of the firing door.

MOTOR SPARKS RESPONSIBLE

THE spark from an improperly installed electric motor or its accessories has undoubtedly been the cause of more than one dust explosion. The National Electrical Code gives elevators a Class II location, and the hazardous areas should be considered as including all parts of the work house, all bins or tanks sections, the drier, and car or dump sheds.

The requirements for a proper electrical installation are given in the National Electrical Code and should be rigidly followed in new construction. In older houses such improvements as are possible should be made from time to time. The more hazardous features which should first receive attention are: open brush motors should be replaced with totally enclosed self-ventilated or pipe ventilated motors; all open fuses or switches should be eliminated; approved starter boxes should replace more hazardous types; with other changes being made when conditions will permit.

The electric lighting system should also have careful scrutiny with all open wiring replaced with conduit. All lighting units should be enclosed in protective globes of approved design, and portable lights protected by both an enclosing globe and a substantial guard. Sockets should be of the keyless type and cords heavy rubber jacketed. A competent electrician should be consulted in regard to necessary changes.

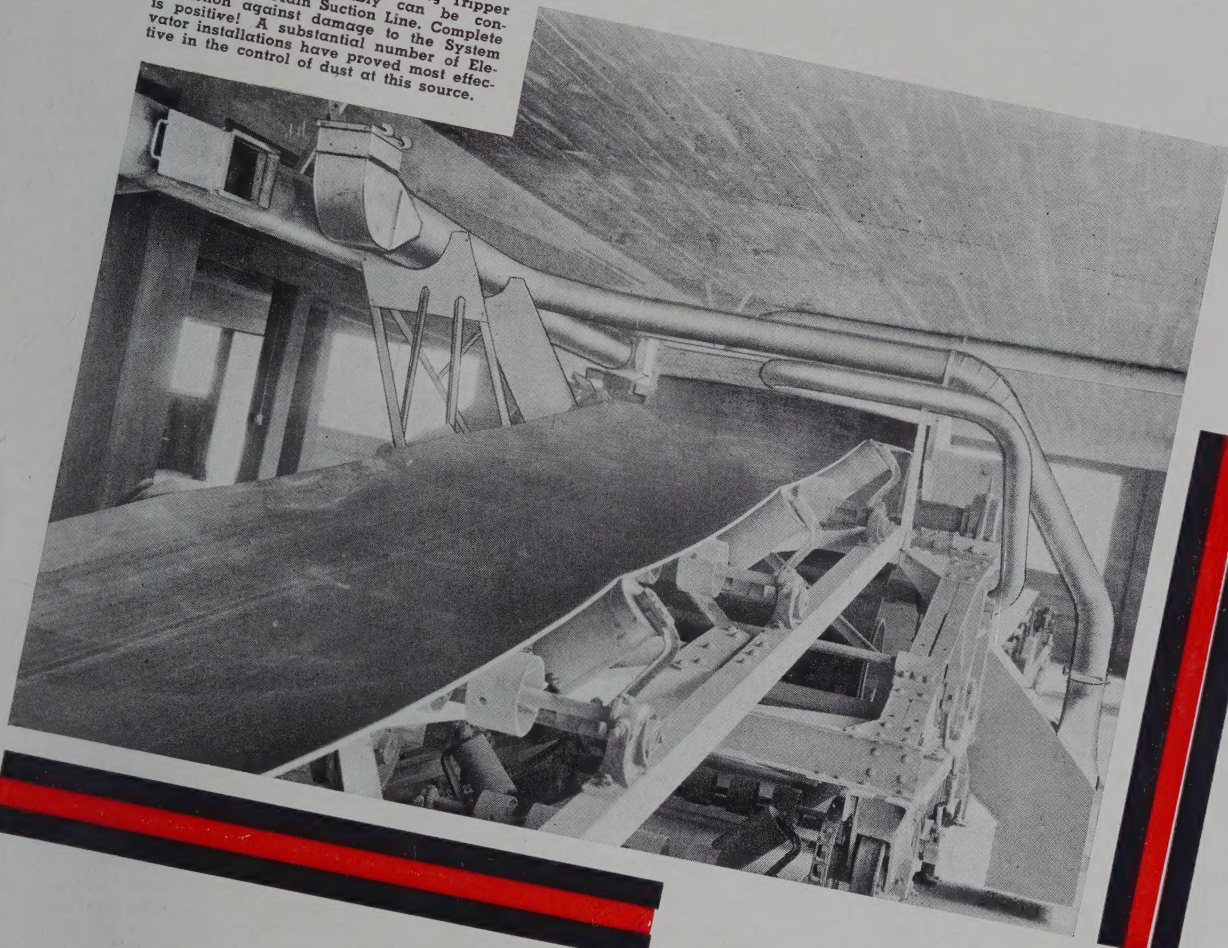
The question of heat is generally not serious, due to the comparatively small sections of an elevator which are heated, but the heating plant should be in a dust free location with care being taken to keep steam pipes away from combustible material.

CANT OVERESTIMATE VALUE

CERTAIN protective devices should be considered by each elevator operator. The Automatic Journal alarm for giving warning of overheated bearings should be installed on all bearings which do not have roller or ball bearings. While there is considerable maintenance cost in keeping these alarms in working order, their value cannot be over-estimated.

The installation of a passenger elevator or manlift greatly improves working conditions, gives better supervision of the upper floors, and per-

Note how easily this Traveling Tripper Dust Collecting Assembly can be connected to the Main Suction Line. Complete protection against damage to the System is positive! A substantial number of Elevator installations have proved most effective in the control of dust at this source.



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mits more efficient watch service. It is particularly recommended that the lift be independently powered rather than be in operation only when the house is operated.

On frame or ironclad houses a standard lightning rod installation is recommended. If the house has ironclad sides and a metal roof, and proper bonds at the eaves, it is very often only necessary to ground the sides to give effective protection. On ironclad houses we would also recommend screening the windows, within 50 feet of the ground on track or dock frontage, with heavy galvanized or painted screens to provide protection against sparks from railroad engines or boats.

Elevators generally being in isolated locations, it is particularly important that standard watchman service be maintained, preferably reporting to a central office with a compulsory predetermined order of stations supplemented by alarm boxes at strategic points throughout the plant. The watchman's job should not be a poorly paid "pension" job for some old or partially disabled employee, but a well paid job attractive enough to make it desirable to young vigorous men who can properly carry on this important assignment. Definite instructions should be given watchmen regarding their duties and procedure in case of fire, especially the importance of immediately turning in the alarm to the fire department when fire is discovered.

SPRAY NOZZLES ELIMINATE STATIC DUST

FIRST aid fire protective devices should be accessibly located on all floors, consisting of standpipe and hose, and water barrels and pails, supplemented by extinguishers suitable

WHAT'S YOUR REACTION?

I FEEL that it will be particularly desirable to obtain the opinions of managers and operators on the effectiveness of some of the recently NFPA approved recommendations on the suction and venting of dust. These opinions can then be discussed at the next meeting of the Dust Explosion Hazards Committee and any necessary revisions in the code prepared for submission at the next NFPA congress, with the approval of the special committee composed of Mr. J. A. Schmitz, chief weighmaster of the Chicago Board of Trade; Mr. Kent Parker, Western Actuarial Bureau, Chicago, and Mr. A. B. Osgood, The Day Company, Minneapolis.—Hylton R. Brown, senior engineer, Safety Division, Bureau of Mines, U. S. Department of Interior, Pittsburgh.

Let's have your comments, boys. You'll all read this new code under which you are now privileged to operate. Please discuss it among yourselves and then with your employers—and give us your suggestions at once!

for use on electrical fires at each motor or group of motors. The building being unheated, the standpipe must be dry pipe with control valve accessibly located, and an alarm calling for the opening of this valve at each outlet. The alarms should be tested regularly to assure proper operation when needed. Elevators being too high to have the usual city pressure effective on the upper floors should be equipped with a fire pump, preferably automatic in action (with separate wires from the sub-station) and of sufficient

capacity to adequately supply the equipment in the elevator. A strong stream of water being apt to throw static dust into suspension, spray nozzles are recommended.

The solution in water barrels should be water and calcium chloride mixed in such proportion as to preclude freezing in the coldest temperature apt to be encountered in the particular climate. Calcium chloride is superior to salt in making a non-freeze solution as it does not crystallize and "creep" as a strong salt solution will, and will depress the freezing point to any desired temperature. Salt solution is limited to only several degrees below zero Fahrenheit. Regular inspection and stirring of the solution in the coldest weather is desirable. Three round bottom pails are recommended at each barrel, the round bottom being specified as it makes the pail of less value for general use. Pails should be painted bright red and suitably marked.

Automatic fire alarms employing the rate of rise principle assure almost instant alarm, and are highly desirable to supplement the watchman service.

ESCAPES NEEDED

ONE or more substantial spiral chutes or outside ladders to the highest floor are valuable means of escape for men who might be trapped on upper floors, and should be included on every elevator.

If public protection is to be of material value to a combustible elevator, it must be instantly available on the arrival of the department. As most elevators are located in railroad yards where hydrants are remote and roads are often only trails, the value of municipal protection is often negligible. Owners should do all in their power to obtain additional hydrants, easily available for use, and to provide a usable road to the plant which should be kept open at all times. They should give careful attention to recommendations of local fire departments and cooperate with them at the time of their periodic inspections.

Regardless of the efficiency of the dust collecting system, or the perfection of the electrical installations, or the value of the first aid or municipal fire protection, the elevator would not be considered a good fire risk or an efficiently operated house if it did not have proper supervision. The best of mechanical equipment needs care, proper oiling and replacement of defective parts; regardless of the efficiency of the dust control equipment, cleaning is constantly required; necessary repairs must be made, and the surroundings kept free from dirt and refuse which could easily be the cause of a disastrous fire. This, gentlemen, is your part of the operation of a first class elevator, and in closing I wish to leave the thought with you that there cannot be a first class elevator unless it has a first class superintendent.

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How We Handle and Store Soy Beans

By **LOU AMBLER**, Elevator Superintendent,
The Glidden Company; President, Chicago
Chapter, Superintendents Society

IN the storing and handling of Soy Beans we have never experienced any real difficulty. We have stored beans of all grades with comparative safety; we have had beans in storage containing moisture up to the amount of 16 to 18% and have kept them for a period of 6 to 8 months with no trouble whatsoever. You must bear in mind, however, that when received, these beans were not overly high in their percentage of foreign material, nor were they musty, sour, or otherwise off-grade. These are factors which no doubt have a direct bearing on the safe storage of any grain.

In the binning of our Soy Beans we follow the procedure of binning according to grades and percentage of moisture content. As our beans are stored only for ultimate production in our own processing plant, we perhaps are fortunate in possessing a little greater freedom in the matter of binning than would be the Terminal Elevator Superintendent who has to make certain grades when the time comes for him to load out and ship his beans.

We make it a practice to set aside the better grades of beans for use in our Edible Products Department. These products, such as Edible Grits, Flour, etc., naturally require a better grade of bean so that the result will be a finished product of top quality. Our lower grades of beans are binned for use in the Solvent Extraction Department. The extracted flakes from this department are processed into the meals used in all types of animal feeding. The major portion of the beans used in our plant are of a No. 2 or No. 3 Grade.

AVOID SPLITS IF POSSIBLE

IN regard to the handling of Soy Beans we try to run through the season with as little rehandling as possible. Aside from the fact that it is costly, rehandling always increases the breakage in grain. We try to keep our percentage of broken and split beans at an absolute minimum, for we have found that we secure better all around results in all departments when processing beans low in their percentage of splits than we could possibly secure otherwise.

It is sometimes hard for us to keep our breakage to a minimum because in the processing of some of our specialty products we must send over to

the plant a bean that has been predried in the elevator drier down to a moisture content of 7 to 8%. Moistures this low are, of course, conducive to the breakage of the grain with the slightest amount of handling.

The little Soy Bean which was practically unknown in the field of industry about 8 to 10 years ago is today ranking high in that same field, thanks to the research chemist.

It is hard to foretell at the present time into how many things necessary in our daily life the Soy Bean will work its way.

The Role of Certain Fungi in the "Sick Wheat" Problem

By
R. C. THOMAS

Ohio Agricultural Experiment
Station

DURING seasons of excessive rainfall at wheat harvest it is not uncommon for grain to be threshed and stored with a relatively large amount of moisture present. Unless care is taken to render further aeration and drying possible while the grain is in storage, a condition known as "sick wheat" will develop sooner or later.

The term "sick wheat" signifies that the grain is distinctly low in quality for milling purposes; it is merely a convenient general description of a condition which may be produced by a variety of causes, some acting singly or in combination with others. In all cases an excessive amount of moisture must be present.

Grain of inferior quality may or may not have a musty odor. This depends upon the degree of moisture, temperature, and types of organisms present. The grain color is nearly always abnormal, varying from a blanched appearance to dark brown or "mahogany." Viability is very much lowered.

FUNGI READY TO ATTACK

IN this investigation the writer is particularly interested in some of the factors which are responsible for the low viability of "sick wheat." It is known that certain genera of fungi

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are nearly always present, either upon the surface or in the seed coat of the grain. If conditions are favorable for the growth of any of these fungi over a considerable period, one can readily understand that the entire grain eventually may be invaded and destroyed. On the other hand, we do not have definite knowledge regarding the possible formation of toxic substances by the action of fungi upon the bran coat of the grain.

Samples were secured from lots of grain designated as decidedly inferior in quality. Tests showed that germination had been impaired to such an extent that only about 20 to 25 percent of the grains were viable. No musty or sour odor could be detected, but the color of the wheat was not normal, being somewhat blanched in appearance. There were no shriveled or starchy grains indicative of scab or rust damage. No brown tip or black tip discolorations were in evidence. Although the different samples varied in appearance, or shade of color, the grains of a given sample presented no marked contrast. In some cases the color variation was so slight that it could scarcely be detected without direct comparison with normal grain.

ODOR NOT CONSPICUOUS

IN order to determine what organisms had actually invaded the outer coat of the wheat, the grains were



¶ And Joseph's ten brethren went down to buy corn in Egypt.—*Gen. XLII, 3.*

SURPLUSES

Ancient AND Modern

As in ancient Egypt, every land down through the centuries has seen years of plenty followed by seasons of want and famine.

And while a cycle of abundant harvests is traditionally a symbol of joy and prosperity in the popular mind, history records that surpluses—and the care of them—have usually created their special problems.

In modern America the grain and milling trade serve as custodians of the cereal grains which provide sustenance for the future—guarding against the dangers of weather, moisture and insect damage with the experience, facilities and techniques developed over a period of many years.

In this broad picture, protection against insect attack represents an important phase. This problem is also ancient, as there is evidence that grain in ancient Egypt was subject to infestation by many of those insects prevalent today. Various means of control were tried then and in succeeding centuries; with what success there is little record.

It is only in comparatively recent times that hit-or-miss systems have begun to give way to positive methods of control in which fumigation figures largely. It may now be said that careful attention to selection and use of a product makes definite control a certainty.

THE *Weevil-Cide*

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KANSAS CITY, MO.

The Safety Engineer

By Henry William Puetz, Safety Engineer

American Motorists Insurance Co., Minneapolis

surface sterilized, then placed in a moist chamber or upon a medium suitable for the growth of fungi. The isolations made by this procedure yielded six different groups of fungi, represented by 13 different species and strains. These included six different species of *Penicillium*, three of *Aspergillus*, and one each of *Alternaria*, *Cephalothecium*, *Helminthosporium*, and *Fusarium*. For the purpose of determining the capacity of any of these fungi to develop toxic products in association with the outer coat of the wheat, cultures were prepared upon sterilized bran and grown for varying periods of time in an incubator at 25° C. Filtrates were rendered free from spores by passage thru a Chamberland-Pasteur filter.

Greatest toxicity was found to be developed by two strains of *Aspergillus flavus*. These belong to the yellow-green group of *Aspergilli*. They are common molds, less familiar probably because their odor is not so conspicuous as that of some other species.

TOXICITY REDUCES VIABILITY

VARIOUS representatives of the *Aspergillus flavus* group have been found to be common contaminants of grains, both in the field and in storage. Under ordinary conditions these fungi cause no concern; but if sufficient moisture is present and temperature is favorable, they will promptly start to grow. Since these organisms are widely distributed, their presence may be anticipated in cases of wheat spoilage, particularly in the bin. They grow well on the bran coat of the grain but much better upon other mill products which are rich in starch and sugar. Spores of these molds may be carried through in the milling process and become a troublesome source of contamination in bakeries.

It is evident from this study that there is a great difference in the toxic effect of the by-products of growth of various fungi, including molds, upon the viability of wheat. All of the organisms used have been found to be commonly associated with grains both in the field and in storage. This association becomes significant only when the moisture content of the grain is high and the temperature favorable for mold growth. Two strains of *Aspergilli* have been found to elaborate toxic products when grown upon bran. The toxicity of these products was demonstrated by the reduction of viability of normal wheat.

WHAT "OLD SNAP"?

I ENJOY reading every line of "GRAIN." I hope the trade responds with continued favorable reaction, as your magazine is sparkling with the old snap of an enterprising publishing staff who will be responsible for making history in the grain trade, encouraging new ideas which have been neglected or discouraged heretofore. Best wishes for "GRAIN."
—Oscar W. Olsen, Peavey Duluth Terminal Elevator Company, Duluth.

THE safety engineer is by necessity

an essential part of our machine-age era and though his services are sometimes of an intangible character, he becomes essential to the security of this machine age because of his knowledge and experience in knowing (1) how and (2) where to look for failures, and (3) how to detect possible failures, and, also (4) his familiarity with safe practices and factors of safety as called for in any particular case. The engineer's timely advice and warnings about hazardous conditions have prevented many serious accidents; and in cases where the engineer's advice and warnings have been ignored, the result is generally very costly in the way of human suffering and material damage.

This is an age of speed and power. Some of the most useful equipment includes powerful plant machinery; high voltage electricity; high pressure steam, gas, air, hydraulics; fast and heavy lifting elevators; magnetic cranes; delicate steel ships, super-submarines; round the world dirigibles, one hundred passenger aeroplanes; modern army and naval ordnance; new alloy steels; automatic telephones; automobiles; modern home refrigeration; radio, television, talkies, moving pictures; steel suspension bridges; modern chemistry, X-ray; steel and concrete skyscraper buildings; synthetic products and machine farming.

Vigilance Price for Continuance

THESE things are some of the most essential means known to man of preserving and carrying on our present day civilization, and the price paid for their continued existence is constant vigilance and frequent inspections for their safety and uninterrupted services to mankind.

Our era is most remarkable for speed and power, and each nation or country strives to have not only great manpower but also to have the greatest amount of mechanical (horse) power per individual person. During the war we learned the value of mechanical power when it was very noticeable that several countries lacked manpower but made up more than the difference with mechanical power.

We are a nation of machines, and only through this machine power can we expect to hold our supremacy and insure our national safety, which so materially affects our very existence. A nation rich in peace must also be

rich in power—pacifism to the contrary.

It is generally believed by the average person that the machine is subservient to man. But in this mechanical age, we mortals sometimes wonder as to whether or not man has become subservient to the machine?

The Cost Is Painful

THE above is a partial list of our machine age ways and means of carrying on our present day civilization which affords us an easier way of getting more out of life in the same span of years than has ever been accomplished before. While it is true that we now get more out of life in a given time in this machine age, we must also consider that the machine takes its toll of human life, sacrifices and injuries on a pro-rata basis in accordance with the amount of machinery involved.

Only the Omnipotent knows how many lives and limbs were saved and untold suffering of mankind avoided by timely inspections which prevented disastrous accidents. This safety service is being rendered every day in the year by the safety engineer in his search for the destroyers of man's handiwork—the rust, fatigue, corrosion, strains, fractures, breaks, time, water and gravitation's unseen laws.

Many of our most appalling disasters in our mechanical world, such as: to ships, railway trains, mines, grain elevators, arsenals, mills, factories, construction of bridges, tunnels, and large buildings, could in almost all cases have been prevented by timely inspections and by giving heed to the engineer's warnings to abide by the safety and engineering principles.

Too Quick to Forget

THE public and the manufacturer sometimes do not fully understand nor appreciate the protection and safety maintained for their benefit by the insurance inspector until a serious accident occurs and then the public and the manufacturer are thoroughly alarmed and demand more timely and rigid inspections to prevent a repetition of the accident. However, the public and the manufacturer sometimes soon forget their painful experience as the insurance carrier absorbs the shock, takes care of all details and makes necessary settlements in accordance with the law.

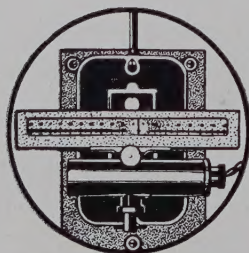
The public and the manufacturer should understand that all insurance rates are based on experience or acci-



Red Pennant Above Red Flag With Black Center Indicates Storm of Great Violence Approaching With Wind From North-east.

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perature In YOUR Bins? . . .
Why Don't You F-i-n-d O-u-t
In A JIFFY With The Fast,
Scientific Safeguard Against
Losses — the . . .



Don't Be WARNED
Too Late—Let Us
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SIGNALS THAT SAVE PROPERTY

dent cost, and that we all play a part in determining the rate, either directly or indirectly as we prevent or cause an accident.

The safety engineer's unbiased, honest and intelligent report on conditions as found in a manufacturing plant or public institution bears constructive advice. And owners, executives or managers can find therefrom some valuable information by looking at their plants through the eyes of an impartial observer, the engineer. For his experience and knowledge accumulated from many years of contact with similar plants located in many different parts of the country enables him to give a very authentic report on what a plant should be if it expects to keep in the open market and meet its competitors on a profitable basis.

The next time a safety engineer surveys your plant, ask him for a written report on conditions as he found them and what recommendations he would suggest, if any. His report may have some valuable information on conditions that sometimes escape the busy executives' knowledge until their attention is called to a serious and costly accident which they would have prevented had they been correctly advised as to the hazard.

EXCESS DAMAGE

"MUCH grain going into terminals is now showing excess damage from various causes," reports Forrest Moyer, Secretary of the Kansas Grain, Feed & Seed Dealers Association, Dodge City. "Much of it is grading down on account of total damage or so-called 'dead-germ.' I recently talked to a miller who has had more than twenty-five years milling experience, and who had inspected samples that had graded in excess of 20% 'dead-germ' which, in his opinion, would not be objectionable from a milling standpoint.

"It seems to be a matter of opinion in judging between the slight difference of color in a live germ and a dead one. We have been told that some of this so-called 'dead-germ' wheat seems to germinate satisfactorily, and if so, it certainly should not be classified as total damage," the report states.

WHEAT IN JEOPARDY

"WHEAT stocks, particularly in the Southwest, are in more danger of getting out of condition this year than in the average year," comes a warning from the Grain & Feed Dealers National Association. "Check the moisture content and general condition of wheat coming in, particularly that which has been in farm storage for some time," the report continues.

TO PUSH WHEAT, FLOUR EXPORTS

QUANTITIES of wheat from its pooled stocks are to be sold for export or for manufacture into flour-for-export at prices below the domestic market, according to the Commodity Credit Corporation. The plan will operate closely in conjunction with the Wheat Export and Wheat Flour Export Programs which have been in operation by the Surplus Marketing Administration since July 1, 1941.

CCC CORN TO LEND-LEASE

TWO million bushels or more of CCC corn is to be shipped at once for lend-lease purposes, according to a report from the Western Grain & Feed Association. "This is no doubt only the first of a series of shipments that will follow."

EXPORT UNLOADINGS SOAR

CARS of export grain unloaded in October this year at Atlantic, Gulf and Pacific ports totaled 3,232, compared with 685 in the same month last year.

CARLOADINGS EXCEED '30 PEAK

ALTHOUGH 1941 carloadings (all) have come mighty close to surpassing the 1930 record several times, it was not until the week ending November 15th that this became a reality. And, what's more, compared to all previous years charted, including the past four, plus 1930, this is the first time when carloadings have gone contrary to the usual downward dip that invariably takes the figures down to the basement with the end of the year.

Cars loaded with grain and grain products continue well ahead of previous years, and line up as follows, for the weeks ending:

	1941	1940	1939
Nov. 15.....	40,297	29,999	36,897
Nov. 8.....	35,532	33,815	37,697
Nov. 1.....	35,852	35,592	37,530
Oct. 25.....	35,083	40,421	40,232
Oct. 18.....	37,564	36,742	44,578
Oct. 11.....	36,553	37,274	38,793
Oct. 4.....	40,180	39,388	41,182
Sept. 27.....	40,480	39,392	45,370
Sept. 20.....	44,839	40,943	46,791

Cumulative loadings since January 1st for the same period show an equally striking movement record, to wit:

	1941	1940	1939
Nov. 15.....	1,785,399	1,649,144	1,732,841
Nov. 8.....	1,745,102	1,619,145	1,695,944
Nov. 1.....	1,709,570	1,585,330	1,658,247
Oct. 25.....	1,673,718	1,549,738	1,620,717
Oct. 18.....	1,638,635	1,509,317	1,580,485
Oct. 11.....	1,601,071	1,472,575	1,535,907
Oct. 4.....	1,564,518	1,435,301	1,497,114
Sept. 27.....	1,524,338	1,395,913	1,455,932
Sept. 20.....	1,483,858	1,356,521	1,410,562

CORN GRIND SOARING

GRINDINGS of corn will probably reach a new peak this year, exceeding previous high records by 20-

25%. Eighty million bushels roughly is about the previous high, whereas this year the hundred million mark will doubtless be exceeded. Some 9,255,941 bushels were ground for domestic consumption alone by eleven refiners of starches, syrups, sugars and other derivatives of corn for the month of October.

Good Will

MY, but they're a nice concern," a salesman enthusiastically told me a few minutes ago, after calling upon an internationally successful company. He didn't get an order, but he was so courteously treated that he looks forward with pleasure to paying another visit, confident that he will be given a considerate hearing. From now on he will be a booster for this organization.

Too many concerns do not treat other salesmen as they want their own representatives treated. This is narrow-minded, shortsighted, condemnable management. Salesmen talk. They can either help or injure any company's reputation.

Springs to my mind a little incident which, in an hour of extreme emergency, proved a turning-point in enabling John N. Willys to reap a fortune. He was struggling with a decrepit motor company which he had acquired. A born salesman, Willys had rounded up orders—but hadn't

enough cash or credit to buy sufficient quantities of parts. A salesman visited the plant, sent in his card to the purchasing agent, was told to wait—and sat cooling his heels for two, three hours. A man finally emerged, politely asked the visitor if he were receiving attention. The salesman briefly recited his tale of woe.

"My heavens, man, you are the answer to my prayer! Come right in."

The polite, solicitous gentleman was John Willys, the salesman was the representative of a concern anxious to supply—and able to supply on credit—a vital part the fledgling motor manufacturer couldn't find elsewhere. Did Willys call down his purchasing agent!

Every efficiently set-up organization provides for the right treatment of visiting salesmen.—By B. C. Forbes in Forbes Magazine.

FIRST "OVER-THE-TOP"

To the Grain and Stock unit of Chicago's 1941 Community Chest campaign has gone the distinction of being the first group in the Industrial Division to go "over-the-top," exceeding their quota at this stage by 101%. Despite this fact, this unit is still carrying on with the objective of reaching affectively all employees of grain and stock firms in the city who are able to give their share.

Can You or Can't You? That Is the Question!

POSTING a notice to the effect that you are impartial to rival unions, relieves you of responsibility for union activities of your foreman.

YOU may not have to pay wages to men training for employment as the Wage-Hour Division has liberalized its interpretation of training time.

IF your state has a law making corporate holders liable, you cannot avoid personal liability for wage claims against the corporation in which you are a stockholder.

REDUCTION of hourly rate to continue working employees for the same number of hours at the same pay in order to sidestep the shorter work week is unlawful.

IF unions do not object, employees in military service can vote in a bargaining election, as they are to get their jobs back on return from service.

WAGES paid to drafted employees may be deducted from gross income and are not subject to Social Security tax.

IF a worker filed false charges against you with the labor board, you still cannot refuse to rehire him, as workers cannot be discriminated against for filing charges, true or false, with the labor board.

A MAJORITY of union workers, not all employees, is all that is necessary for arrival at a contract. Refusal to abide by such a contract is considered as refusal to bargain.

IF a contractor working on your plant does not pay his employees in accordance with the Wage-Hour Law you cannot avoid responsibility as such work is "hot"—if you are engaged in interstate commerce.

IF your opinion has the effect of coercing workers, in spite of the right of free speech, you cannot express such opinion.

EMPLOYES' pension funds may be treated as employees' trusts for federal income tax purposes, even though there is no agreement for trust.

LAWFULLY discharged union employees do not have to be placed on a preferential rehiring list as no violation of labor acts was committed by discharge.

PROVIDED that you do not have a closed shop agreement, you cannot discharge members of one union to avert strike by another.

SHORT lunch periods, during which workers are subject to call, are considered as waiting or rest periods and must be counted as time worked.

Bugs Damaging Grain Surplus

Special to the World-Telegram.

CHICAGO, Oct. 23.—America's food for defense project is rapidly turning into food for bugs, says the current crop summary used by Cargill, Inc., national grain merchandisers.

Daily reports of spoiled grain, wet grain, sprouted, bleached, damaged wheat, insect infested bins and such have become so common that no one can comprehend the tremendous quantities of our so-called food reserves that are daily becoming unfit for human consumption, the report states.

The survey says that statistically the United States has one of the largest productions of all grains in history but has less actual human food this year than statistics show.

*...and there's
No Need of it!*

LARVACIDE Treatment, as the need is indicated, kills weevil and moth, including egg life and larvae • Tends to overcome musty odors and to sweeten grain • Easily applied, effective and a sound economy • Larvacide has a record of sixteen years' satisfactory service to the elevator trade • Write for helpful literature on Pest Control.

Larvacide

is a tear gas fumigant, shipped in liquid form, in cylinders 25-180 lbs. and 1-lb. bottles, each in metal can, 6 and 12 to wooden case. Stocked conveniently near you.

INNIS, SPEIDEN & COMPANY

Established 1876

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BOSTON • PHILADELPHIA • OMAHA

CORONER'S REPORT ON FUMIGANT DEATH

DR. K. R. BROWN, Coroner of Clarke County, Iowa, has filed his report on the fatality mentioned in our October number. It will be remembered that toxic poisoning was believed to have killed Herbert L. Burgus on October 8th.

Mr. Burgus was fumigating AAA corn, of which he had done quite a little. Upon emerging from one of the bins he was treating he told his assistant that he had inhaled a whiff of the fumigant being used, even though he was wearing a gas mask.

Local newspapers reported that death came within three hours after he had complained of inhaling the gas—Mr. Burgus becoming unconscious even before the doctor called could attend him at his home.

In his final report, Coroner Brown states that all blood tests were negative, which he says is not surprising, considering that the patient lived for about three hours after symptoms developed. While the cause of Burgus' death is given as being "from gas poisoning while fumigating corn . . ." with a fumigant containing methyl bromide, Coroner Brown states that blood tests or tissue examination would not prove that methyl bromide was the main toxic ingredient.

Methyl bromide is indicated as the main intoxicant, however, in the manner of Burgus' death, with carbon tetrachloride and ethylene dichloride of secondary importance, according to Coroner Brown.

A report on the mask and canister used was not received from the U. S. Bureau of Mines at the time our information was obtained. The mask appeared to be functioning well with no leakage when tested superficially by the Coroner. Dr. Brown did feel that the canister used (yellow) was not the most suitable for these organic vapors, and that the black canister would have been the correct selection.

A-3 PRIORITY FOR EXTREME NECESSITY

A PRIORITY rating of A-3 may be used—after obtaining special permission from the authorities—in case of extreme necessity, according to a bulletin from Grandon Swanson, Secretary, Western Grain & Feed Dealers Association, Des Moines, Iowa. "It is necessary to prove the extreme necessity," Secretary Swanson pointed out.

Amendments to priority rulings are being added continually, and the situation seems to be changing all the time. Our industry as a whole is enjoying benefits that would have been impossible if it were not for the good work done by Ray B. Bowden, Executive Vice President of the Grain & Feed Dealers National Association.

MINNEAPOLIS CHAPTER STEPPING OUT

OUR Fall meetings are developing nicely. Every member at our October meeting was charged with the responsibility of bringing in a prospective Superintendent to our next meeting. Furthermore, one of our members will be delegated to see each prospective Super and go right down the line with him as to why he does not belong to our association. And we'll give him any support necessary in the front office.

We figure that with only one prospect for each member to contact that we can canvas the whole territory around here and know that we have at least been in touch with everyone.

Carl Bach, Twin City Trading Company, Chapter Vice-President, is Chairman of our Membership Committee, with George Patchin, Appraisal Service Company, and Carl Elstad, Cereal Grading Company, as members thereof.

Robert Bredt, Fruen Milling Company, is chairman of the Entertainment Committee and is doing a tip-top job. With him are serving Pat Bohan, Eearle Elevator Company, and Lewis Fried, Spencer Kellogg & Sons, Inc.

Malcolm Noxon, Ralston-Purina Company, will have charge of Safety, as usual. Malcolm has been a very fine worker and I certainly would like to see him rewarded with a national

chairmanship. Ed Raether, Chamber of Commerce; Maynard Losie, Hallet & Carey Company; James Auld, Hales & Hunter Company; Jack Coughlin, Brooks Elevator Company; Robert Bredt and Pat Bohan have really come to the front in particular for our Chapter.

We had thirty-five at our first meeting, which was moved up to September 23rd on account of the hunting season. We have all been very busy all Fall. However, we will continue our meetings on the last Tuesday of each month as heretofore.—Vincent Shea, Van Dusen-Harrington Company, President, Minneapolis Chapter.

C. P. MAY HEADS MILLERS

C. P. May, Superintendent of the Crete (Neb.) Mills, was just elected chairman of District 2, Association of Operative Millers. For several years Mr. May attended SOGES conventions, having active charge of the company's grain merchandising.

FRAUENHEIM INTO MALTING

Edward E. Frauenheim Jr., General Superintendent of the Buffalo (N. Y.) Forwarding Corporation and an active Director of the Superintendents' Society, has entered the malting end of the parent company. Ed was a welcome visitor on October 14th, while attending a maltsters' convention. Perhaps the SOGES can pick up some hopping good pointers as a result.

GRAINMAN TO DEFENSE ARBITRATION BOARD

In order to expedite the immediate settlement of any commercial or industrial disputes which might delay fulfillment of national defense contracts and thereby hinder armament efforts, the American Arbitration Association has just added Harry H. Langenberg, President of the Langenberg Brothers Grain Company, St. Louis, to its "national panel" of arbitrators, among others, throughout the country.

TOM EMMERT IN CALIFORNIA

I noticed in the September Number of "GRAIN" that Oscar Olsen is wondering whether the Mr. Emmert, formerly with the Standard Milling Company at Kansas City, could be the new Super of the Lehigh Coal Dock now being used for grain storage in Duluth. Hardly think this is possible, as the last I heard from Tom, which was during September, he was in California, advises Peyton A. "Jim" Kier, Standard Milling Company, Kansas City, Mo.

JIM SHAW STILL CONFINED

JIM SHAW, retired veteran Superintendent of the Canadian Pacific Elevator at Port McNicoll, Ont., and an active past Director of the Superintendents' Society, is still not enjoying the best of health.—F. J. Sullivan, Manager, Strong-Scott Mfg. Co., Ltd., Toronto.

OUR COVER

MUCH as we all like photos of grain handling and processing plants, because therein lies our livelihood, it is seldom that the pictures thereof have any life and character to them.

This month's cover is, we believe, one of the most striking in composition of any you've seen in a long, long time. The clouds and the adjoining wheat field make it unusual, and we're sure the folks at the Burrus Mill & Elevator Company in Fort Worth will be mighty proud of the complimentary manner in which our alert engraver has given the photo of their plant such unique treatment.

Multiplying their storage capacity eight fold, General Manager J. Paul Smith writes that their company now has 4,000,000 bushels at this unit—which is one of many operated by this firm. Of the 3,500,000 bushels recently added, 2,500,000 is of conventional type storage and 1,000,000 of flat storage, giving them the largest elevator capacity directly connected to any flour mill in the Southwest.

At least 100 cars a day can be handled in the three new unloading pits alone, and two additional lines of rail for a total of five give the plant three miles of car handling capacity. Daily flour capacity was stepped up concurrently to 4,500 barrels.



UR buildings permit of the most economical interior storage of grain, chemicals, etc. Spans to over 800 feet and heights to suit.

These buildings are easily dismantled and reerected. Convertible to other uses without structural change, buildings may be used for recreation purposes after the defense program is over. Most economical to build and to maintain.

Our record for structural stability and economy is unmatched. Inquiries are invited.

ARCH ROOF CONSTRUCTION CO., Inc.

53 West 42nd Street, New York City

"HAMMOND" Screw Conveyor Systems

OFFER YOU MANY EXCLUSIVE ADVANTAGES FOR PROCESSING AND HANDLING ALL KINDS OF BULK MATERIALS

- 1st** Movement can be on the incline, vertical or horizontal, with efficiencies heretofore impossible to attain.
- 2nd** Compact design and construction with dust, moisture and weather-tight features.
- 3rd** Space and head room requirements reduced to a minimum.
- 4th** Exclusive and outstanding engineering developments.
- 5th** Economies in cost of installation.
- 6th** Minimum operation and maintenance expense.
- 7th** Use of alloy construction where corrosion or contamination are encountered.

Consult us
on your
material handling problems

With our many years' experience in solving conveying problems in a multitude of processes, you are assured of sound recommendations, backed by modern construction features and engineering design. We have produced systems which are far beyond conventional practice and which have solved problems for our customers to their utmost satisfaction and economy.

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707 HOFFMAN ST. HAMMOND, IND.
SCREW CONVEYORS HAMMOND PRODUCTS ELEVATOR BUCKETS
TRADE MARK REG. U.S. PAT. OFFICE

CHARLES PHILLIPS' BODY FOUND

CHARLES PHILLIPS, former Vice-President and General Manager of the Seedburo Equipment Company (formerly the Seed Trade Reporting Bureau), Chicago, was buried on November 29th. As reported in a previous number he disappeared from sight on September 5th while swimming into shore from his boat which was anchored a short distance out in Lake Michigan off the Wisconsin shore.

He was an excellent swimmer and the only plausible explanation was that he had been exposed to excessive sun. He had experienced difficulty in getting the motor started on the boat, so tossed the anchor overboard with the probable intent of returning for the watercraft later. Every effort was made by planes and coast guard to recover the body, without avail. Recovery was finally made across Lake Michigan near Muskegon.

STIFLING HIS SCOTCH

YOU certainly are doing a nice job with "GRAIN" and are entitled to all the congratulations which you are bound to receive. To show you how enthusiastic I am over the publication, I am stifling my Scottish nature and enclosing a plea for a bill for subscription. Best success for the publication.—Frank E. Hagan, former Director of Public Relations, Chicago Board of Trade.

NEW BROCHURE READY

EVERYONE is vitally interested in the magnetic separator installed in the Calumet Elevator in Chicago and amazed at the amount of metal it takes out of the incoming stream of grain.

Further details are helpfully described in a new brochure available by writing Dings Magnetic Separator Company, 525 E. Smith St., Milwaukee.



SNOOPER, the Boiler Room Cat, says: Be a leader in the "Safety Parade"! "It Beats the Band" how accident-free working days aid production.—C. Gibson Franks.

CHAPPLES VISIT POULTONS

Our good friend, Bennett Chapple of the American Rolling Mill Company, Middletown, Ohio, is definitely going be with us at convention time at Omaha, next April 2-3-4, advises Past President Percy C. Poulton, N. M. Paterson & Company, Ltd., Fort William.

Mr. and Mrs. Chapple stopped off briefly on a boat trip from Duluth to Detroit recently, that being the route they had to take to return home from flooded Northern Wisconsin.

"I made them both acquainted with Senator Paterson," Percy writes, "and I believe they enjoyed their short visit with him. His visit to the Canadian lake head gave him a different slant on the honorary membership he holds in our Society. Both went through our elevator."

LATHROP TO ADDRESS MANAGERS-SUPERINTENDENTS

ON DECEMBER 16th, the Managers and Superintendents of grain handling and processing plants in the Kansas City area will hold another of their successful joint dinner-meetings under the auspices of the Superintendents Society's local Chapter there.

Mr. William B. Lathrop, widely known grain man now in charge of the Commodity Credit Corporation's office, is to be the speaker before this group which is expected to exceed the 100 mark. The affair will be held at the Phillips Hotel, according to William Deegan, Continental Grain Company, President of the Superintendents' Chapter.

APPRECIATES HONORARY MEMBERSHIP

I APPRECIATE very much indeed the card of honorary membership which the Society sent me. It was very nice of the Society to extend this membership to me some years ago, and during my travels the past years and in my absence from Duluth I have continually kept this in mind.

I am somewhat familiar with the activities of the organization which have been reported to me quite frequently by Oscar Olsen, Superintendent of the Peavey plant here in Duluth. Your new president, Paul H. Christensen, of Van Dusen-Harrington Company, Minneapolis, is well known to me. I used to know his father quite well (and knew Paul when he was a very small boy).

I assure you that I appreciate the honor very much, and will try to keep in mind your next annual meeting, and will be present if I possibly can.—Cecil C. Blair, Vice President, Consolidated Elevator Company, Duluth.

[Mr. Blair contributed greatly to the success of the Society's convention in Duluth in 1936, as did Mr. Walter McCarthy of the Capitol Elevator Company, Duluth. Both are Honorary Members of the SOGES.]

LOOSE LIFE TRYING TO SAVE HIS FRIEND

NORMAN WALSH of Washburn Crosby Company, Buffalo, was killed recently when he tried to save the life of Charles Morlock, who had leaned against an elevator gate which gave way. Walsh reached for Morlock and fell also. Morlock escaped with bruises.

\$50,000,000 STORAGE CHARGES

CARRYING charges during the current year on loan wheat and pooled wheat may approximate \$50,000,000, according to J. B. Hutson, President, Commodity Credit Corporation, U.S.D.A., in his talk before the Kansas Farm Bureau, Manhattan, Nov. 6th, entitled "Looking Ahead at Our Financial Problems."

"Storage costs are particularly heavy in the case of wheat and it should be pointed out that this item alone may result in substantial losses if reserve stocks are excessive," he said.

FUMIGANT SITUATION EASES

DURING the past few months the commercial grain fumigant field has experienced an unparalleled supply situation. Three successive seasons of heavy insect infestation, combined with increasingly large stocks of grain in storage, have resulted in a tremendous accumulative infestation and a corresponding huge demand for fumigants. Unfortunately, this abnormal demand has coincided with a drastic shortage of chlorinated hydrocarbon solvents which comprise the base of most grain fumigants. The shortage has been due to necessary diversion to defense usage of over half the normal industrial production of the basic chlorine.

This shortage has hampered the operation of all grain fumigant firms. This situation was brought to the attention of the U. S. Department of Agriculture and eventually to the Office of Production Management, notably by the Commodity Credit Corporation to whom the appeals of scores of large grain and milling firms were directed. As a result the OPM recently made an eminently fair and adequate allocation of the required chemicals to the various commercial grain fumigant companies.

These developments necessarily took considerable time—as has the implementing of the allocation in the form of actual deliveries. Just recently increased supplies have begun to be received so now fumigants are available on an adequate basis.

OPPOSED TO NFPA FUMIGATION CODE

REGARDING the National Fire Protection Association's Fumigation Code, the boys here went on record as opposing it due to the fact that we would have to have a licensed operator to do the fumigating. It was the opinion that a clamp should be put on the manufacturer so that fire-hazardous fumigants could only be sold to licensed fumigators.—Charles F. Walker, President, Omaha-Council Bluffs Chapter, S. O. G. E. S.

Add Defense Savings Bonds to your investments. Serve your country and conserve your earnings.

OMAHA GETTING READY

WE ARE getting ready for the 1942 convention here in Omaha. It's going to be a good one.—Charles F. Walker, Archer-Daniels-Midland Company, President, Omaha-Council Bluffs Chapter.

PRIORITIES O.K. IN FEED

"SINCE we got Preference Rating Order P-22, which gave the feed industry a priority on repair and maintenance materials, things have been working along pretty well.

"The tendency in Washington is to get away from priorities and to go on a basis of allocations. The approach to this will be gradual. We may have to set up an outline of what metals and other materials covered by priority restrictions are needed in the feed industry for the next year.

"In the meantime if the industry sticks close to the rules and regulations in Order P-22 it may continue to work out all right and the allocations program may not be necessary." —Ralph M. Field, President, American Feed Manufacturers' Association, Chicago.

ALLERGY TO BARLEY DUST

ALLERGIES to various grain dusts are not too uncommon. Reviewing cases we have known about recalls various degrees of intensity in suffering—all the way to rose fever and the pullmotor squad.

One inquiring correspondent states he has suffered from grain dust just the past few years, barley dust being particularly irritating. Swelling spells on hands and legs sometimes become quite serious, and the skin on hands and wrists itches and breaks.

Science has developed protective creams for protection against skin allergies which experienced industrial doctors are glad to prescribe.

PAGING MR. J. E. GRANT

ONE bright and cheery morning in came one of the post cards enclosed in each copy of "GRAIN" (and you might send more of them in, by the way). It asked for information about some of the items listed thereon, and was signed with a familiar signature and read "J. E. Grant, Jos. E. Seagrams & Sons, Lawrenceburg, Ind."

Right away we jumped at conclusions and changed all our records to show that Mr. J. E. Grant, Superintendent of the Canada Malting Company, Ltd., Winnipeg, had moved. We wrote for confirmation only to find there were two gentlemen with the name of J. E. Grant, and have only to suggest that they both plan on attending the Superintendents' convention in Omaha next April 2-3-4 and get acquainted.

ACCIDENT TOLLS OUTSTRIP STRIKES

INDUSTRY loses thirteen times as many man-hours from accidents and injuries as it has from defense strikes, according to a radio speaker recently heard. That is a terrific toll that cannot continue to be borne.

WAGE-HOUR TO SUPREME COURT

ACASE of fundamental importance to many firms in the grain trade now has been accepted by the Supreme Court for review. When an employee is paid a regular weekly or monthly salary, the salary being set up on the basis of the maximum hours commonly worked in any work-week, the government held that the hourly rate of pay would change in the case where the employee's work-week fluctuated below the number of hours set up for the regular pay.

Where it is shown that the employee in some work-weeks is paid the full weekly salary without being required to actually put in the full maximum hours commonly worked, the government holds that the employer recognized that the employee could earn that salary in less than the maximum hours commonly worked, thus raising the rate of hourly pay.

The federal district and circuit courts held against the government, and the appeal to the Supreme Court was taken.

NEW SUPERIOR ELEVATOR OPENS

DULUTH-SUPERIOR can now boast of a total of 51,550,000 bushels of storage space with the taking in of their first grain by the new 4,500,000 bushel Farmers Union Grain Terminal Association's elevator in Superior. While the plant is not entirely completed, nevertheless it was formally opened on November 15th.

Some forty Minneapolis and St. Paul grain men and millers attended the festivities. Mr. Matt Sauter is Manager at Duluth and Russell Johnson, formerly with the Capitol Elevator Company, is Superintendent.

INSPECTION DUE

INSPECTION of all feed establishments will be resumed by the Wage-Hour Division, U.S.D.L., in January to ascertain compliance under the Fair Labor Standards Act.

TO KEEP NAMES PROMINENT

LEADING manufacturers are not curtailing their advertising appropriations and sales promotion campaigns because the national armament program has created a rush of business, a survey recently indicated. Many will increase their advertising efforts.

★
**MERRY CHRISTMAS TO ALL—
AND TO ALL A GOOD YEAR** ★



★
Our holiday greetings are simple and sincere. May your Christmas be a joyous one; may 1942 reward your efforts with success and good fortune. Best wishes to one and all from each and every member of the Hart-Carter organization! ★

★ *The Hart-Carter Company*
Engineers, Manufacturers of Grain Cleaning Machinery
Minneapolis Minnesota ★